

PATENT  
28-703762001  
BSC 03-158

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:	)	
	)	<b>Confirmation No.: 1753</b>
<b>Douglas Coldwell, et al.</b>	)	
	)	<b>Group Art Unit: 3739</b>
<b>Serial No.: 10/668,995</b>	)	
	)	<b>Examiner: Peffley, Michael F.</b>
<b>Filed: September 22, 2003</b>	)	
	)	
<b>For: FLAT ELECTRODE ARRAYS</b>	)	
<b>FOR GENERATING FLAT</b>	)	
<b>LESIONS</b>	)	

AMENDMENT AND RESPONSE

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action, dated September 30, 2005, please amend the application as follows:

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being transmitted to the Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below via the USPTO EFS-Web filing system.

2/28/06  
Date of Deposit

Jocelyn L. Lee  
Jocelyn L. Lee

CLAIM AMENDMENTS

1. (Currently Amended) An apparatus for treating tissue with electrical energy, comprising:  
a substantially rigid cannula comprising proximal and distal ends defining a longitudinal axis therebetween, and a lumen extending between the proximal and distal ends; and  
an array of electrodes disposed within the lumen of the cannula and deployable from the distal end of the cannula substantially perpendicular to the longitudinal axis, thereby substantially defining a plane, wherein each of the electrodes takes the form of an elongated, solid metallic, resilient member.

2. (Original) The apparatus of claim 1, wherein the electrodes comprise substantially flat tines comprising a width lying generally within the plane when the electrodes are deployed from the cannula.

3. (Original) The apparatus of claim 1, wherein each of the electrodes comprises a distal portion that is substantially straight and an intermediate portion that is curved when the electrodes are deployed from the cannula such that each distal portions lies substantially within the plane when the electrodes are deployed from the cannula.

4-6. (Cancelled)

7. (Original) The apparatus of claim 1, wherein the electrodes are biased to extend in a direction substantially perpendicular to the longitudinal axis, the electrodes being deflectable into a compressed configuration when retracted into the lumen of the cannula.

8. (Currently Amended) A method for treating a tissue structure using a cannula comprising an array of electrodes deployable from a distal end thereof, wherein each of the electrodes takes the form of an elongated, solid metallic, resilient member, the method comprising:

advancing the electrodes from the distal end of the cannula such that distal portions of the electrodes lie substantially within a plane;

placing the distal portions of the electrodes in contact with a surface of the tissue structure;  
and

delivering electrical energy from the electrodes to the surface to treat the tissue structure.

9. (Original) The method of claim 8, wherein the tissue structure comprises a pleura.

10. (Original) The method of claim 9, wherein the surface comprises a tumor.

11. (Original) The method of claim 10, further comprising exposing the pleura before placing the distal portions of the electrodes in contact with the surface of the pleura.

12. (Original) The method of claim 10, wherein the electrical energy is delivered for sufficient time to destroy at least a portion of the tumor.

13. (Original) The method of claim 8, wherein the electrical energy is delivered for sufficient time to create a lesion in the surface.

14. (Original) The method of claim 8, wherein the electrical energy is delivered for sufficient time to cause coagulation of the surface.

15. (Currently Amended) A method for treating a pleura using a cannula comprising a plurality of electrodes deployable from a distal end thereof, wherein each of the electrodes takes the form of an elongated, solid metallic, resilient member, the method comprising:

advancing the plurality of electrodes from the distal end of the cannula such that distal portions of the electrodes lie substantially within a plane;

placing the distal portions of the electrodes in contact with the pleura; and

delivering electrical energy from the electrodes to treat the pleura.

16. (Original) The method of claim 15, further comprising exposing the pleura before placing the distal portions of the electrodes in contact with the pleura.
17. (Original) The method of claim 15, wherein the pleura comprises cancerous tissue.
18. (Original) The method of claim 15, wherein the electrical energy is delivered for sufficient time to cause necrosis of at least a portion of the pleura.
19. (Original) The method of claim 15, wherein the electrical energy is delivered for sufficient time to cause coagulation of the pleura.
20. (Original) The method of claim 15, further comprising inserting the distal end of the cannula into a thoracic cavity before advancing the plurality of electrodes from the distal end of the cannula.
21. (New) The apparatus of claim 1, wherein each of the electrodes is exposed along its length when deployed from the distal end of the cannula.
22. (New) The method of claim 8, wherein each of the electrodes is exposed along its length when advanced from the distal end of the cannula.
23. (New) The method of claim 15, wherein each of the electrodes is exposed along its length when advanced from the distal end of the cannula.